

\*\*\*\*\* *The*  
RAINBOW  
\*\*\*\*\* *and the*  
POT *of* GOLD

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LESSON TWO







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## THE RAINBOW AND THE POT OF GOLD

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THERE is a fine old story about a pot of gold resting at the foot of every rainbow. But people smile at the tale, for who can find the foot of the rainbow? Indeed there are plenty of rainbows to be seen, but how often do we hear of people finding pots of gold? We should not be too literal. Perhaps there is some truth in this figure of speech. Perhaps there is significance in the fact that the rainbow represents color—the finest, purest color in the world. From it we derive our knowledge of color harmony. This knowledge we have learned to put into use in the decoration of beautiful objets d'art. And when people see these colorful objects they long to possess them, will to possess them, and offer money in exchange. We accept the offer saying to ourselves, "Now we will create still more beautiful objects that will charm those who look upon them." More people will buy, and tell their friends. Your earnings will increase with your production of colorful novelties. So, through your skill in manipulating the colors you have come to know through this lovely natural phenomenon, the rainbow, you will come into possession of your proverbial pot of gold, literally an enviable income. Now will you say there is no truth in this old saying?

As the rainbow is one of Nature's sensitive expressions of beauty, so you will find in all natural manifestations of color, a perfect harmony that gives pleasure to the eye. Green foliage, bathed in warm, yellow sunlight, and delicately mottled with soft shadows of violet, offers a color scheme that never fails. The azure sky, flecked with jade, and filled with billowy mountains of iridescent, orange-tinted clouds (you have seen the same colors in an opal) will give you a color scheme of distinct effectiveness.

And any flower is a lesson in color and design. Watch Nature carefully, thoughtfully, and you will learn to understand colors at their best. You have heard it said that the sky is blue, the grass is green, sand is yellow, and shadows are gray. Do not believe a word of it until you see for yourself, and with an eye that is critical and cautious, trained by systematic observation. One blade of grass is green, but a meadow or even a city lawn may present a wide variety of colors in which there may be but little pure green. Likewise the blues of the sky are many, and other colors are present there in varieties of tints and shades.

Learn to watch the sky and note the true colors there. Learn to watch the landscape—woods and fields, city streets, back alleys, lakes and rivers. Give flowers your closest attention. Study people and their complexions, the color of their hair and eyes and the clothes they wear. Few people know how many colors exist. They recognize red, yellow, blue, brown, purple, and gray with a few trade names that come into existence with changing fashions. But no color has ever been invented that did not first exist in nature.

All colors except black and white may be derived from the three primaries, yellow, red, and blue. These colors are combined in sunlight which, if filtered through a prism of glass, will cast a perfect set of rainbow hues upon a white surface. If you have a plate glass window with beveled edges in your house, you will have seen such lovely fragments of color cast upon the floor. Sir Isaac Newton named the color sequence as follows: red, orange, yellow, green, blue, violet, and indigo. Modern scientists will not recognize some of these colors because of their identification with fruits and flow-



ers. However we artists need not be so exacting, for we require names to identify our colors. Before going far in this course you will be familiar with the manner in which colors are mixed, and the many results obtainable.

For the present, put aside all of your enamels except the three primaries—yellow, red and blue. Open these cans and stir them well. Have your turpentine and a clean rag handy. A piece of glass or an old plate will do for your palette. Dip up a brush-full of yellow and let it run onto the palette. Clean your brush and dip it in the red. Make a puddle of this red near the yellow on your palette. Wipe your brush again. Now take a tiny speck of red on your brush and mix it into the yellow. That will deepen the yellow a trifle and start in the direction of orange. Put a little spot of this yellow on the upper left corner of a practice board. Then add a little more red to your yellow. Now it is almost orange. Record this also on your practice board until you run out of red. Then, with two fresh puddles of red and yellow, add yellow to your red a little at a time until the yellow is used up. Now you should have all the stages between yellow and red, which embrace the various tones of orange, scarlet and vermillion.

Orange is the complementary of blue. It is difficult to test this color in the way that I like to recommend—that of gazing at a color and removing it quickly after a few moments leaving an image before the eyes in the opposite or complementary color, but it can be done under certain conditions. One day I was looking out into the yard from my window. My eyes were fairly dazzled by the bright sun shining upon a bed of orange dahlias. After looking at them for several moments, I turned quickly into the comparative darkness of the room and in the shadows a perfect image of the

flower bed danced before my eyes, but the flowers were blue. If these flowers had been blue, the image would have been orange. Red and green are complementaries. You can prove this to yourself in an interesting manner. Get in a place where the light is strong, if possible in bright sunlight. Take something that is a bright, dazzling red, and hold it up before your eyes. A piece of red flannel pinned upon the wall about four feet away will give excellent results. Gaze at this steadily until your eyes become bleary, not attempting to concentrate or focus your eyes. Then take it away suddenly, and you will see suspended before you, the after image of the red object in green. Likewise if you watch a red light burn in the dark, when you turn away your eyes will carry the after image in green, and a green light will produce a red image. A yellow light will give you a violet image and a violet light a yellow image.

Complementary colors, if correctly used, always go well together. The idea of red and green may sound rather harsh, but think of the poppy, the red rose, the holly berries of Christmas, all complemented by leaves of green. Your eyes never revolt at such combinations.

Having discovered that blue and orange are complementary, remember that orange may be dulled or "grayed" by the addition of blue, and blue may be dulled by the addition of orange. Try a few shades of orange with blue tempering. Then try red with green, green with red, yellow tempered with violet, and violet tempered with yellow.

The next group of colors for you to study is the green series, or the various shades between yellow and blue. Just as you added red to your yellow in the first experiment, add blue now, only a speck at first and then more and more until your blue is used up. Record each result. Then begin with blue



and add yellow, watching results carefully. You will make some delightful shades.

The color to be studied now is violet, in all of its tones between red and blue. Begin by adding blue to red and recording the result of each combination. Then begin with blue and add red. When you have completed you will have practically all the normal shades of violet.

Now you will want to know something about the brown shades. Brown may be dominated by yellow, red, or blue, or any combination of the two. First mix equal parts of red, yellow, and blue. You have then one shade of brown. Now add an abundance of yellow. You have a yellow brown. Now add an abundance of blue. You have a rather greenish brown. Now add an abundance of red. You have a reddish brown—or perhaps it has a tendency towards purple. Add considerable orange to your brown. It will be brightened and warmed by this mixture. Add considerable green. This will make a so-called olive drab color. Add violet in quantity and you will get something like maroon. There are many kinds of browns that can be found through experiment. When you are trying to match a color, use your judgment and mix until you have matched the color well enough. Someone once asked Whistler with what he mixed his colors. He replied: "With common sense." I offer this to you as advice from one of the world's greatest painters.

I am going to give you a list of color harmonies for you to experiment with in your spare time. Remember that there are many varieties of every color, and that to make a good harmony, some colors must be seen in quantities while others should only be present in small proportions. It is impossible to give a comprehensive chart covering this subject, as the predominance of certain

colors depends largely upon where they are to be seen and upon what articles. Use all your color sense and discretion in trying out these color schemes.

*Yellow will harmonize with brown—black—green—violet—blue—red.*

*Red will harmonize with black—orange—gold—violet—yellow—neutral gray—blue—green.*

*Blue will harmonize with red—black—white—yellow—orange—neutral gray—salmon pink—light yellow—gold—brown—green.*

*Dark green will harmonize with yellow and gold.*

*Orange harmonizes with red—green—violet—brown—yellow—blue—black.*

*Violet harmonizes with scarlet—yellow—tan—gold—orange—green.*

*Bluish green harmonizes with orange.*

This is by no means an exhaustive table of color harmonies. There are hundreds of combinations not mentioned here, and proportions of the colors in a combination make a difference in its effectiveness.

If you are trying to get some particular tone of color and are unable to do it with enamels alone, a little oil paint mixed in may do the trick. Oil paint will mix perfectly with enamels and as there are many more shades in oils than it is possible to get in enamels, the combination may prove very useful to you at some time or other. Of course you will want to use but a very small proportion of oil paint—just enough to produce pigmentation.

You will be interested in studying the effects of colors upon people. Some colors excite the nerves. Some soothe them. Some suggest warmth and others coolness. Red and yellow are warm. Blue is cool. How-



ever, in combination these colors affect each other. You will find much use for knowledge of this subject when you are asked to handle jobs of interior decoration. If you happen to know that the house or room that you are going to plan the color scheme for is habitually cold, you can actually improve this condition by using an abundance of warm colors in the room. The warm colors will actually contribute to the comfort of the room and whether or not the thermometer registers a higher temperature, the occupants of the room will feel warmer. Seventy degrees in a room decorated in pale blue will not keep the people in it comfortably warm. On the other hand, if you are called upon to decorate a summer home or hotel at a summer resort, the use of cool colors will be very appropriate. Pale blue and tan are comparatively neutral colors, very pleasing to the eye and restful to the nerves. In such a combination the tan, of course, should be dominant, and the blue included in the trimmings.

Everyone desires an atmosphere of cheer and happiness in the home. Nothing has more effect upon the emotions than colors. Have you ever noticed how, in a dramatic presentation, colored lights are used to produce certain emotional effects—to influence your moods and thus help you get into sympathy with the movement of the plan? Usually two colors are used, one for light and one for the shadows. Red is exciting. Green is ghastly. Blue is mysterious. Blue also seems to describe the spirit of sadness and various assortment of “blues” have come into popular music with resulting public approval. When we are angry we say that we “see red.” And I am sure you have heard of that “dark brown taste” that theoretically comes on the morning after the night before. Thus we naturally link colors, which normally come to us only through the sight sense, with emotions, and the other senses. It is a well known fact that some blind

people can tell colors by touching them, especially when they are exposed to direct sunlight. This is probably because some colors absorb light while others reflect light and therefore do not hold much of the heat. That is why we wear light colors in the summer time.

Here beside my desk is a newly made lamp shade. It is very attractive, made of fancy blue figured paper. It has refinement and dignity. But when it is lit the cold blue light that filters through the shade actually makes one feel chilly. I have seen several people look at it in admiration, and then visibly shiver and say, “Br-r-r-r!”

Colors fill an important part in your life. They fit into your scheme of existence with an infinite value. They give character and life to your surroundings. They emulate the rainbow.

To birds and insects, color is life itself. The bright colors of flowers attract insects and there they find the honey upon which they live. Likewise the mating of insects is accomplished by the attraction of color and design. Have you ever seen a Luna moth? Such a delicate blue-green is a treat to the eye. Spend a few days this summer watching insects and their wonderful coloration. Birds, too, charm each other with their beautiful plumage. Have you ever watched a brilliantly colored male bird court his selected mate? He will spread his wings and tail, and puff out his breast, making the best of his handsome plumage. His fiancée will look him over with admiration. If some other male with a more brilliant array of feathers does not come along and eclipse him, his suit is won. Can you see how this system may work out in your little gift shop? Of course, you will dazzle your prospective customer with such a brilliant and beautiful outlay of giftwares that he will forget that he has ever been in another shop.



Now, I am sure, you are anxious to make some more plates, so I am going to help you do some and meanwhile learn a little more about colors. Turn to page 9 where you will find Plate 1 of Lesson 2. This, as you see, is a group of Chinese lanterns, representing the spectral colors and their complementaries. The lantern at the upper left is red, the first color in Sir Isaac Newton's spectrum. It is striped with green lines, which are its complementaries. Close beside it is the second color, orange, striped with its complementary which is blue. The yellow lantern with its complementary violet is below at the left. Opposite it, in the right lower corner is the green lantern with a jagged band of complementary red. Between these two hangs the long blue lantern with bands of complementary orange. In the upper right hand corner you find the violet colored lantern, adorned with scrolls of yellow, its complementary. This outlay is representative of the rainbow, lacking but one color, indigo, which is only another shade of blue. You will, while executing this plate, acquaint yourself with these colors upon which all other colors are directly based.

There are many things you can learn while executing Plate 2, Lesson 2, The Color Tree. This is to give you some experience in mixing for tints or "pastel shades." There are two ways of mixing these "grayed" tones. One is by the addition of white, and the other is by the addition of a complementary. I usually use both white and the complementary. Suppose, for instance, that you wish to make a soft, dull tone of blue. You will add a little of orange, which is the complementary. This may make a color that is too dark, perhaps even muddy. Then add white until the color has brightened up considerably, and from time to time, add a bit of orange, when it is needed. Do not count on formulae to accomplish your colors.

Experimentation is the only method that is satisfactory. Always experiment freely and with an alert mind. Do not be disappointed if you do not produce the color you are working for immediately, but take an interest in the colors you do produce. The time will come when you will need them.

Did you notice that the skyline in this plate is violet? In nature, distant objects always take on a violet aspect, due to the fact that sunlight, which is yellow, naturally is complemented by a violet shadow. The next time you are out of doors, where you can see far away, notice the "purple distances." They are quite as clearly violet in the big city as in the country.

Plate 3, Lesson 2, consists of two simple designs upon backgrounds of violet and black. The octagonal design shows the three primaries, red, yellow and blue, and the secondaries or colors derived from the primaries in combinations, or violet, orange, green and brown. The triangle shows you the relations of three colors prominent in Nature.

Having had contact, now, with practically all the colors you will ever have occasion to use, I suggest that you spend some time looking over this lesson before you put these plates into execution, as the principles here involved will come into your daily experience. You will be consulted by your patrons upon every phase of color harmony as it is used in interior decoration, the arrangement of drapes, novelties, furniture and pictures, and the painting of walls and floors. You must be prepared to tell them what colors should be used in rugs or carpets, upholstery, lamps and everything that goes into making a home what it ought to be. Fireside Members are considered, all over the world, as authorities in such matters, so I beg you to know your colors well, that you may hold up the good reputation. It will more than pay you.



## Specific Directions for Plates of Lesson II

Clear a space upon your work table where you have plenty of elbow room. Open your cans of enamel and stir them thoroughly, so that the pigment is well distributed and the liquid is of an even consistency throughout. Be sure that your brushes are clean.

Trace the first plate of Lesson 2 upon your practice board, according to the method you learned in Lesson 1. First trace the design upon the tracing paper. Then with the yellow carbon paper between the tracing paper and the lesson plate, shiny side down, retrace the design upon the tracing paper, which will transfer it onto the lesson plate. If it is difficult for you to see the yellow lines, use black carbon paper.

Now begin painting in the upper left-hand corner and work gradually down and to the right. Never bring the edges of two colors together until one of the colors is past the running stage. This is usually when it has become quite sticky. A good plan for time saving is to put on one color wherever it is called for, then put on another color wherever it is needed, and so on, being extremely careful not to smudge. On this plate, for instance, you would put red on the lantern in the upper left-hand corner and on the stripe in the lower right-hand corner. Then you might put the yellow portions in the lanterns in the other two opposite corners. Put the plate aside for an hour or so until the enamel is set. Then you can put the green parts on the lanterns in the upper left and lower right, and put the plate aside for a couple of hours, after which you can do the two center lanterns. Be sure to leave the little space of natural

board on the black strip at the top and bottom of each lantern for the high light.

Draw your border line with a ruler, to make sure that it is straight, and carefully letter in the title of the plate. I would strongly advise the use of India ink for this purpose. Use beveled edge ruler with the beveled side down.

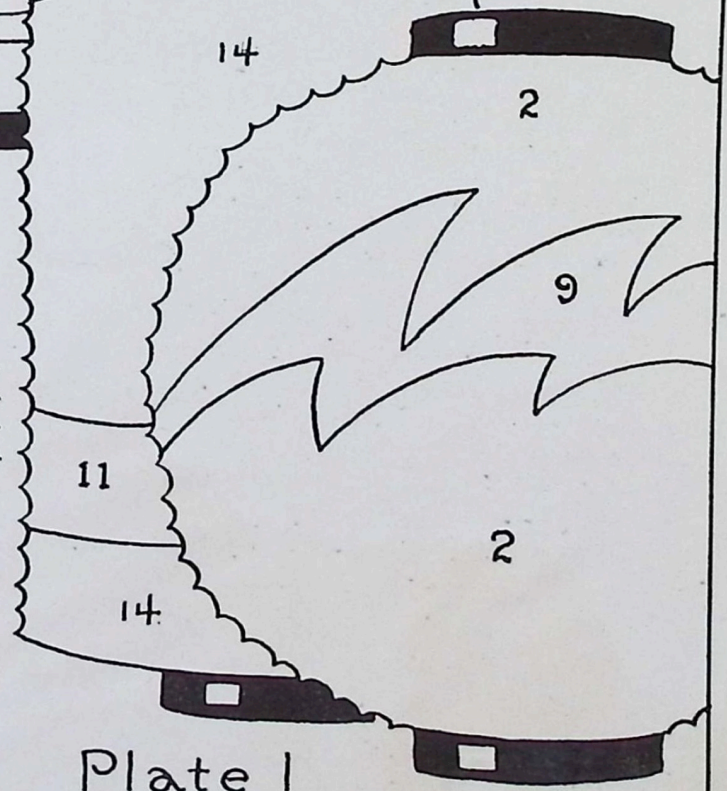
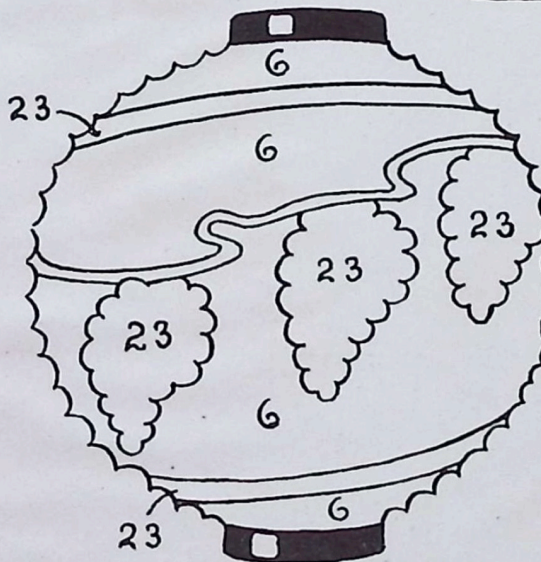
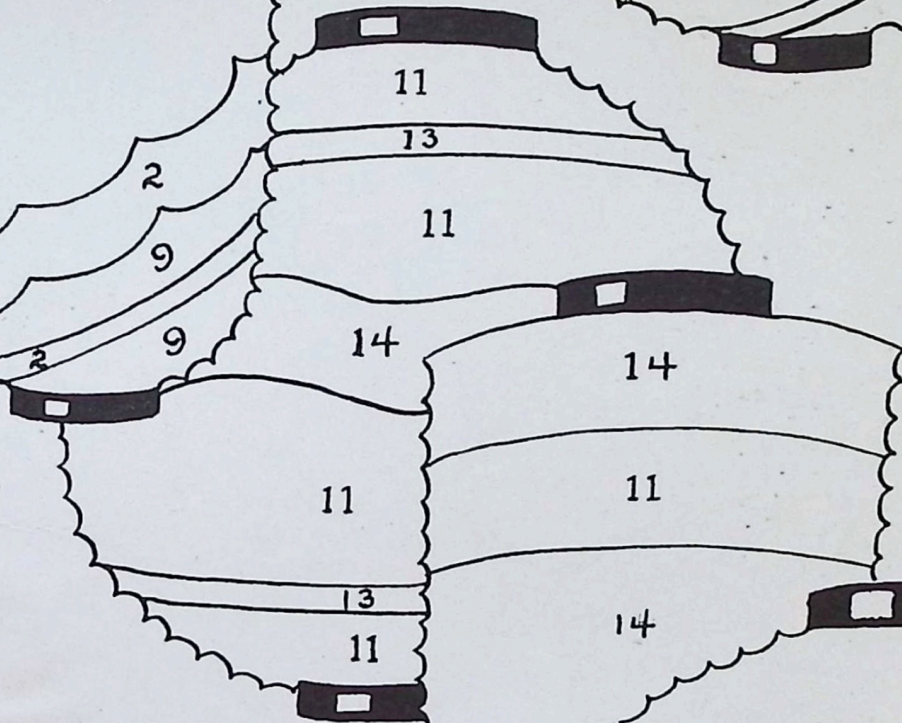
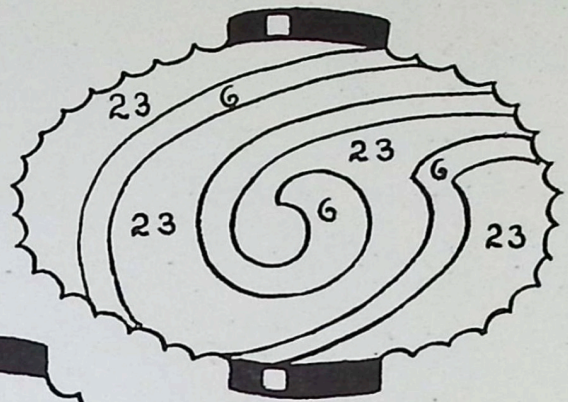
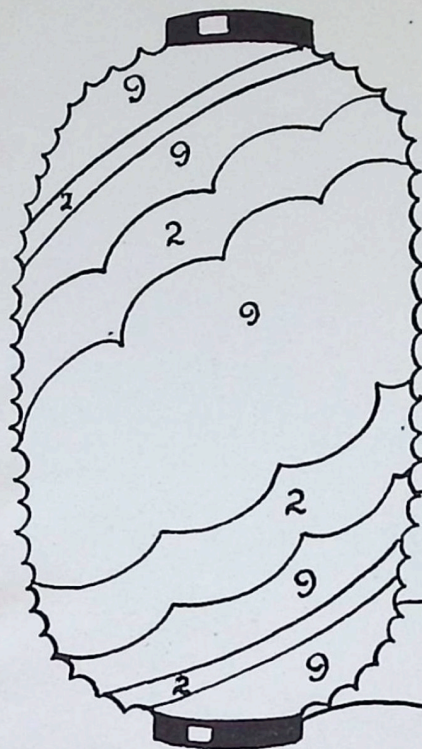
Now you can begin Lesson 2, Plate 2, The Color Tree. I would advise you, in doing this plate, to do the flowers first, working from the top down. Then fill in the foliage with light green on the left and dark green on the right, as is indicated by the numbers. Be very careful in painting in the trunk to keep inside the outlines. Next paint in the violet skyline and under it the green.

The third plate calls for backgrounds of violet and black. The best way to handle this is to paint them in solid without outlining the figures. Then, when dry, trace the figures out on the background, using yellow carbon paper. This, then, may be completed in enamel in one operation, by painting from left to right. This plate calls for all the colors you will ordinarily use, so take particular note of them.

Now you may, as soon as the plates are thoroughly dry, fill in the date on the back and send them here to the Home Studios where we will study them closely and discover your tendencies and how they may be encouraged or corrected. In the meantime I would suggest that you carefully study Lesson III and be prepared, when these plates are returned to you, to proceed with the plates of the next lesson.

*Jacques André Petit*





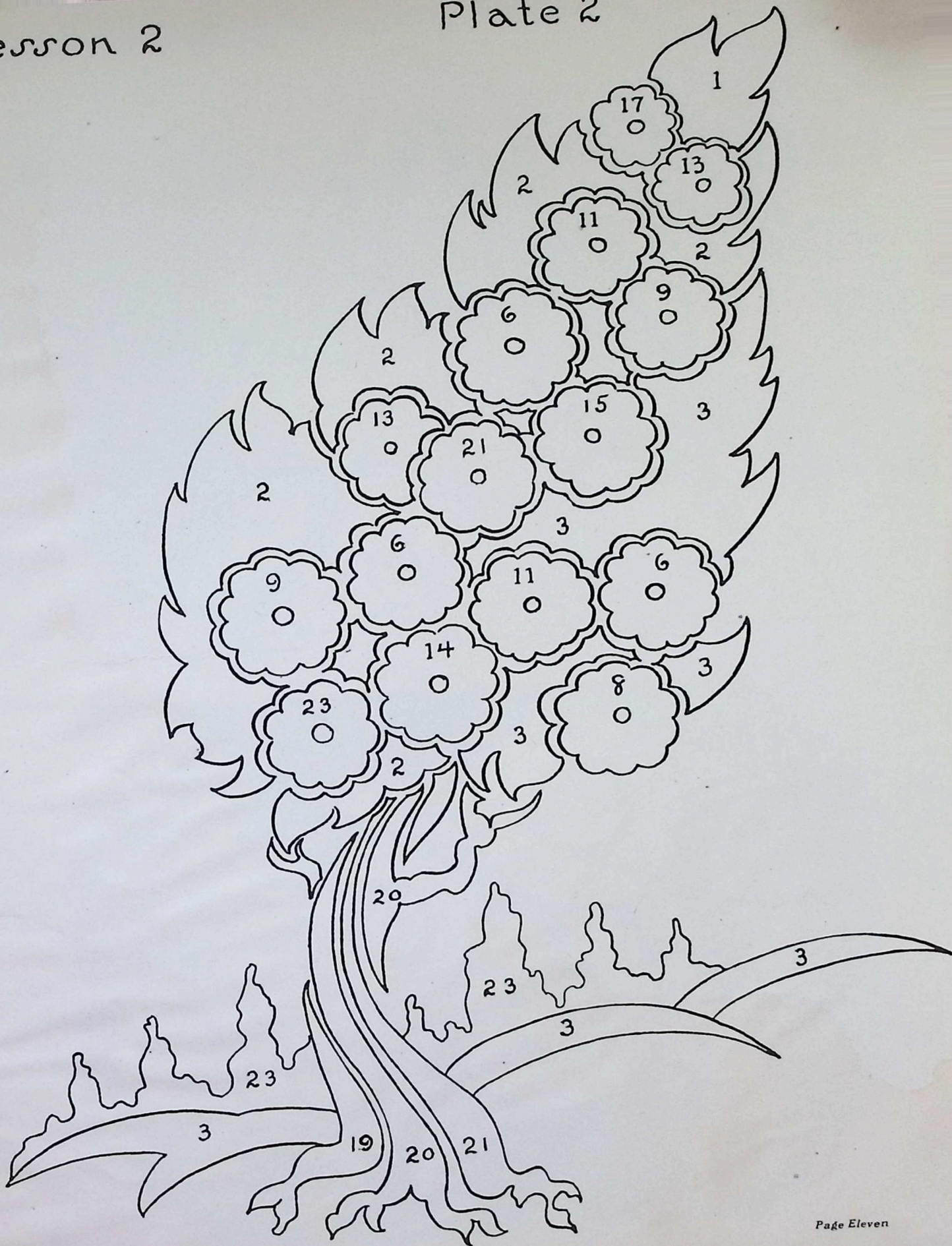
Lesson 2

Plate 1





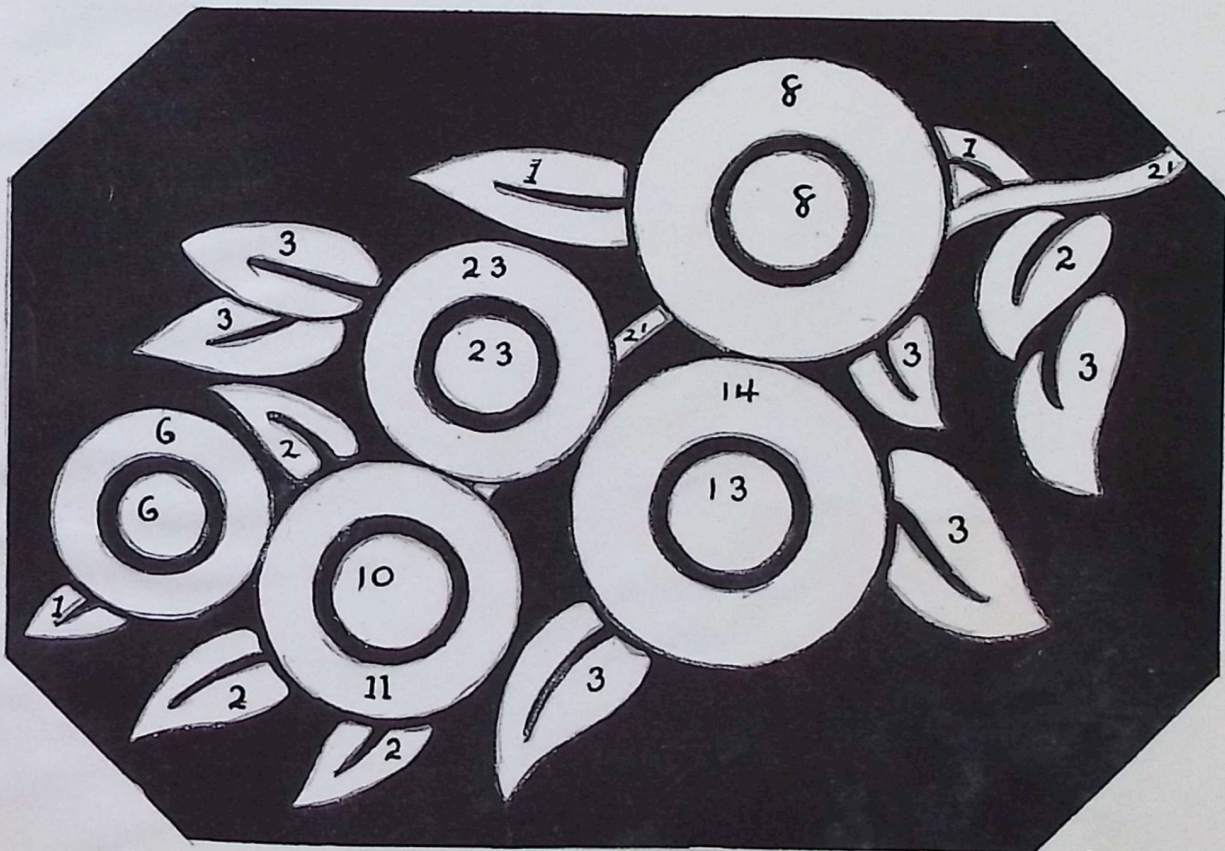
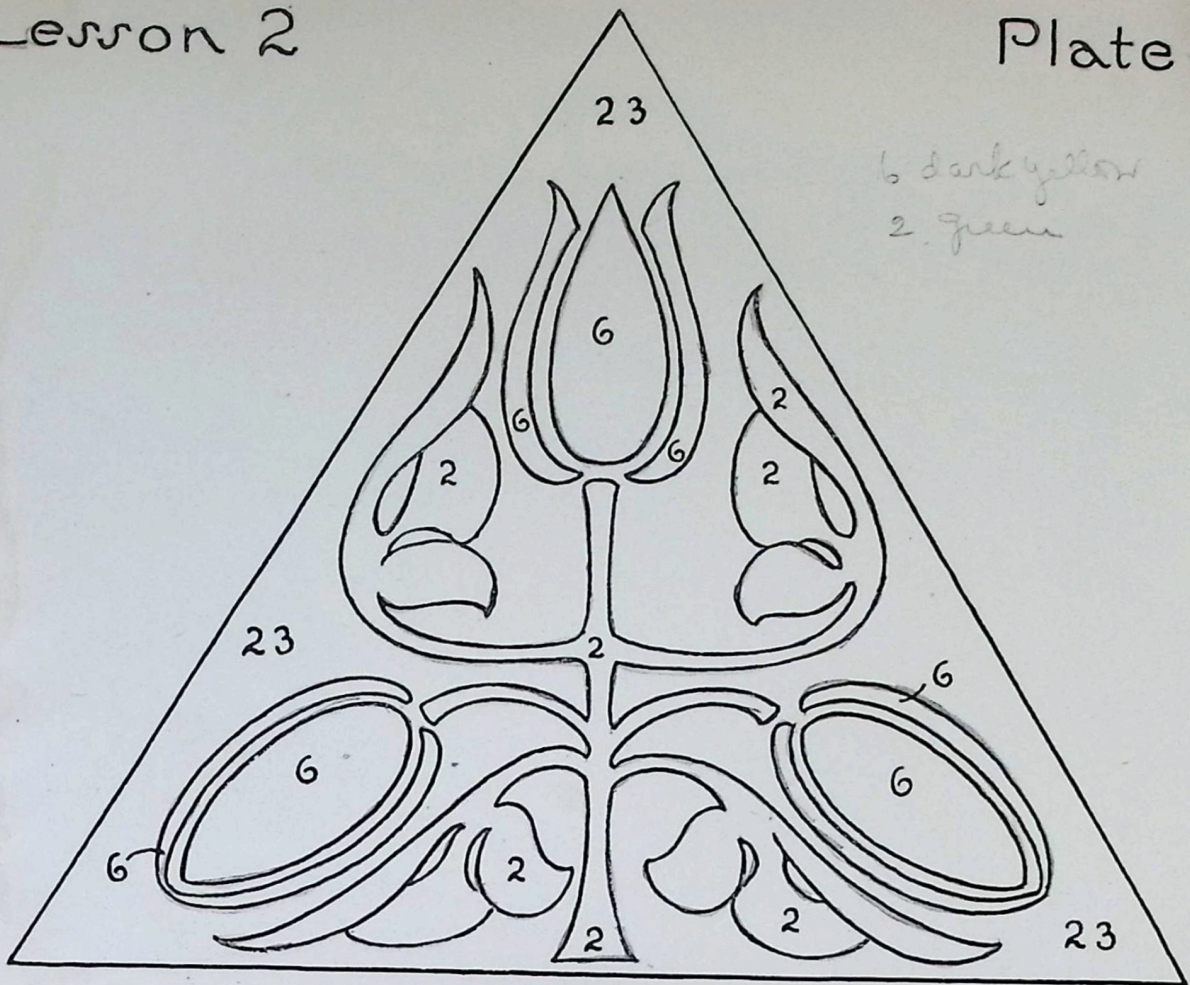






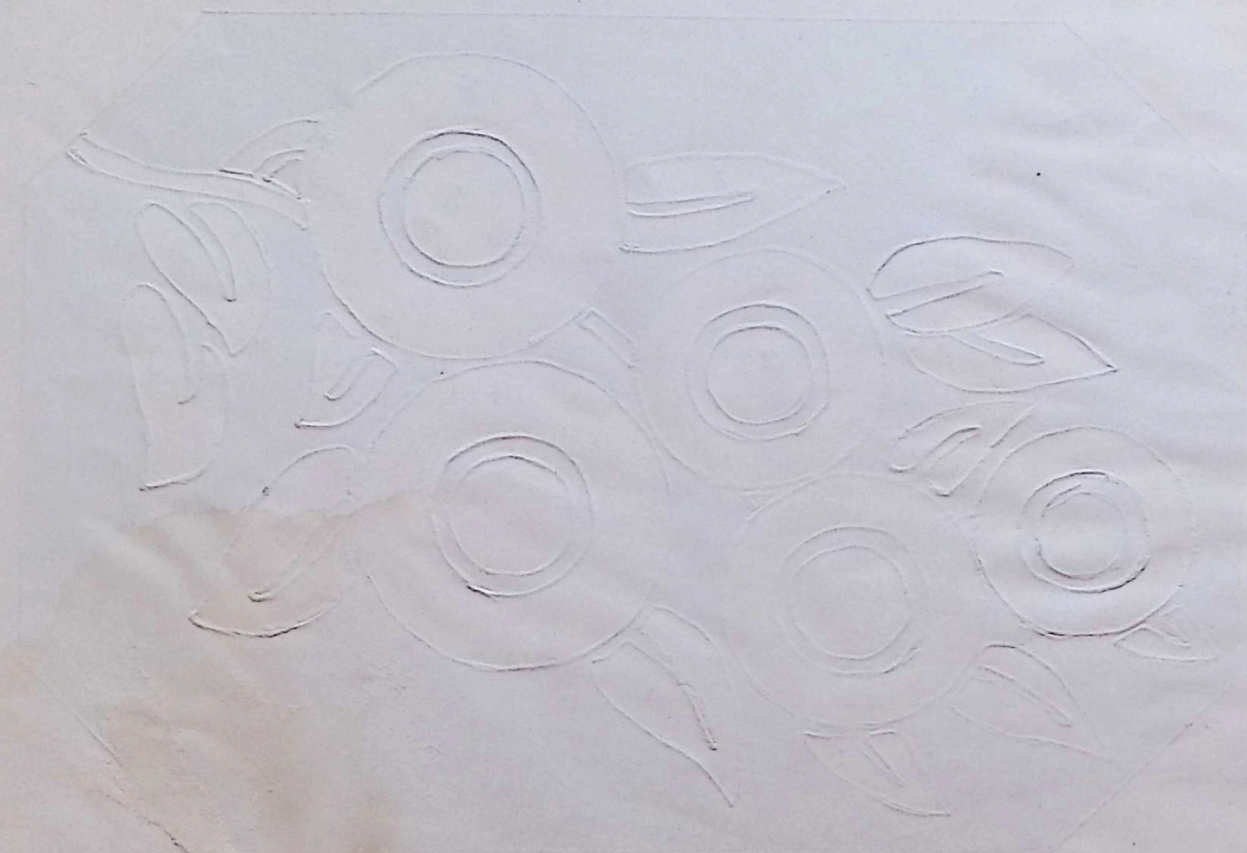
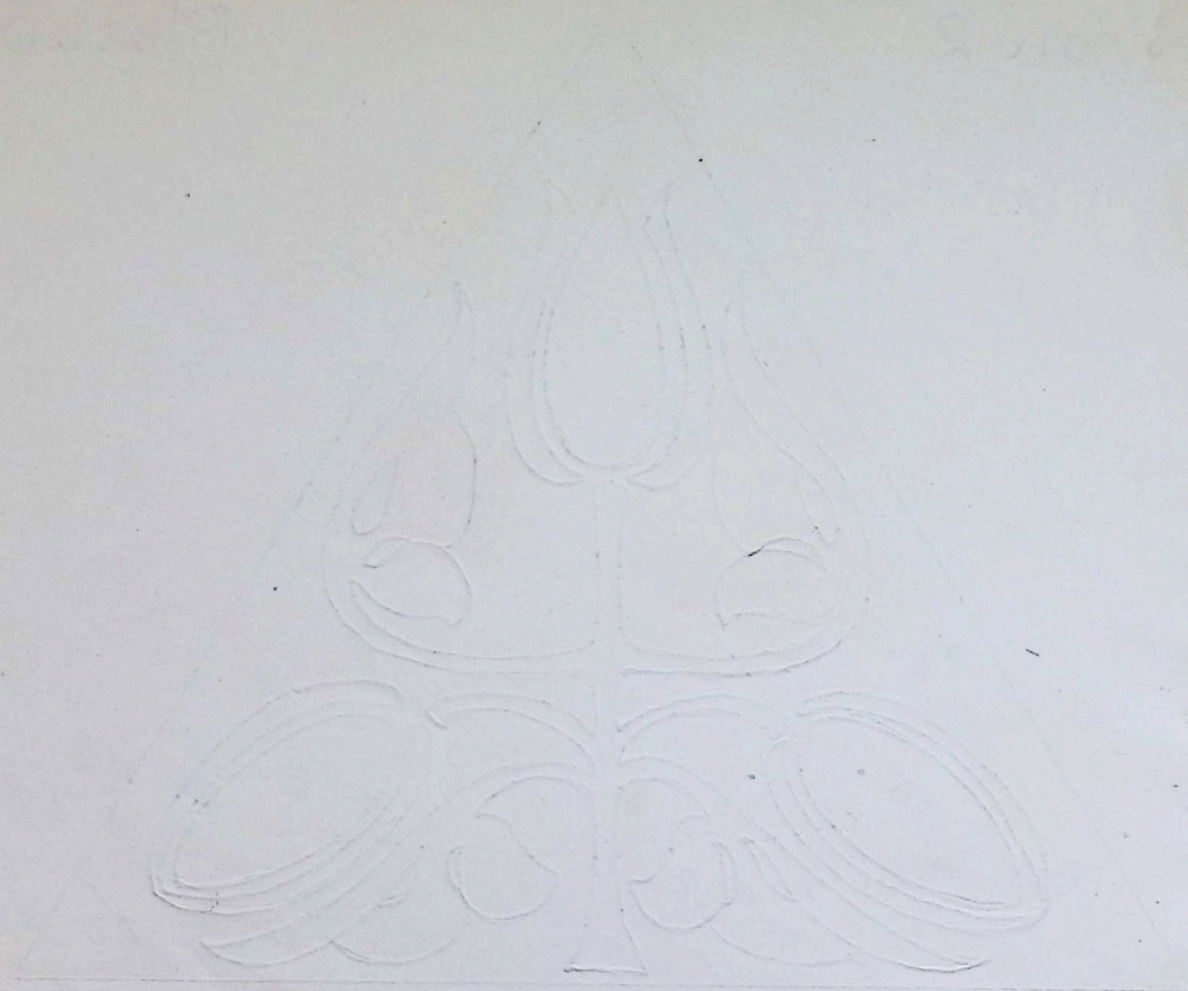






8 red  
1 light green  
2 green  
3 dark green  
23 violet  
21 dark brown  
14 blue  
13 light blue  
6 dark yellow  
10 light orange  
11 orange













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